Date:

Friday, 02/05/2008 8:50:03 AM

User:

Julie Lecocq

Process Sheet

Customer

: CU-DAR001 Dart Helicopters Services

Drawing Name

: BEARING ASSEMBLY

Job Number **Estimate Number**

: 38981 : 10716

P.O. Number

: 02/05/2008

: 38568

S.O. No. :

Part Number

Due Date

This Issue

: NC : //

Type

Drawing Number

: D3121241 : D3121 REV E

Project Number : MACHINED PARTS

: N/A

Drawing Revision : E

Material

: 15/05/2008

Each

Previous Run Written By

Comment

Prsht Rev.

First Issue

Checked & Approved By

New issue KJ/DS : Est Rev:A 04.02.18

07-11-12 DD verified by:EC Est Rev:B ECN 1060

Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description:

MDELRINR12500 1.0

DELRIN ROUND BAR 1.25"



Comment: Qty.:

0.0546 f(s)/Unit Total:

10.9200 f(s)

Material: Ø1.25 Delrin Rod (M-DELRIN-R1.2500)Identify as D3121-25

Batch: 107758

2.0



Comment: HARDINGE CNC LATHE SMALL

1-Turn D3121-25 Cap as per Folio FA387

2-Deburr

QC2



PARTS AS THEY COME OFF MACHINE Comment: INSPEC



4.0

3.0

QC8

SECOND CHECK



Comment: SECOND CHECK

5.0 D312123 Bearing



Comment: Qty.:

1.0000 Each(s)/Unit

Total: 200.0000 Each(s)

Pick:

Qty Part Number 1 D3121-23

Description Batch

Bearing _



Page 1

Form: rprocess

Dart Ae	rospace l	Ltd							
W/O:			WC	ORK ORDER CHANGES					
DATE	STEP			NGE	Ву	Date	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Cate	gory:NC	R: Yes	No DQ	A:	_ Date: _	
					QA: I	N/C Close	d:	_ Date: _	<u></u>
NCR:			WORK ORDI	ER NON-CONFORMANC	E (NCI	R)		· ·	
DATE	0.TED	Description of NC		Corrective Action Section B		Verific	cation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign of Date	& Secti		Chief Eng	QC Inspector
			,						
					-				

NOTE: Date & initial all entries

User: Juli	day, 02/05/2008 8:50:03 AM ie Lecocq	Process Sheet	
Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name: BEARING ASSEMBLY	
Job Number	38981	Part Number: D3121241	
Job Number:			
Seq. #:	Machine Or Operation:	Description :	
6.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1	
		(Put lock in STOCK) (190 x) IRCE 1 // D3121-25) of N) 01
Comm	ent: SMALL & MEDIUM FAB RESOU	IRCE 1 // D3121-25) de m	-
	1-Press D3121-23 Bearing into D	03121-25 Cap as per Dwg D3121 \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	်
7.0	QC5	INSPECT WORK TO CURRENT STEP	
		25 Pale con	nls
Comm	ent: INSPECT WORK TO CURRENT	STEP 5 0501-5706 (4190)	1
8.0	PACKAGING 1	PACKAGING RESOURCE #1	´
: 			
Comm	ent: PACKAGING RESOURCE #1		
	Identify and Stock Location:	//s/s/((140)	
9.0	QC21 C	FINAL INSPECTIONANO-RELEASE	
		08/55/	26A)

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



U 08-05-06

Dart Aerospace Ltd

-W/O:		WORK ORDER C	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		

Part No: D3121- 241 PAR #: NA Fault Category: Ded Mrs. 1955 NOR: Yes No DQA: Date: 29/05/06

QA: N/C Closed: D Date: 05/05/06

NCR: 38981		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STED	Description of NC		Corrective Action Section B		Verification	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector
08/05/06	6	Kink one learing when install delrin D3121-25 Human error	POSIOUR	Scrap it with one debrin No ryplace	08/05/06	08/05/06	Passour	्र ७इडीव्हीव्हे
		1						
				, i	1			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 3898
Description: Cap	Part Number: D3121-25
Inspection Dwg: D3121 Rev: E	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

		X First Article		Prototype		
Drawing	Toloronoo	Actual	Accept	Reject	Method	
	Tolerance	Dimension	Accept	Kejeci	Inspecti	

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.315	+/-0.010	+315				
Ø1.000	+/-0.010	1.002				
Ø0.838	+/-0.002	-838				
R0.063	+/-0.010	.055				
R0.010	+/-0.010	.608	÷			
0.230	+/-0.001	,229				
Ø0.865	+/-0.001	1229				
			,			

Measured by: 20	Audited by:	381	Prototype Approval:	N/A
Date: 08/05/04	Date:	060504	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	04.04.20	New Issue (P/O D3121-241)	KJ/RF	
В	06.06.09	Ø1.000 diameter was Ø1.024	KJ/JLM	
С	08.01.16	Dwg Rev. updated	KJ/EC/DD	



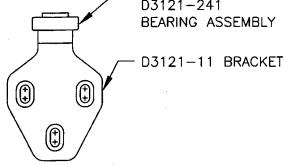
DESIGN DRAWN BY		DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHEC	KED	APPROVED	DRAWING NO. REV. E
	911	AP	D3121 SHEET 1 OF 10
DATE			TITLE SCALE
07.1	1.07		BRACKET ASSEMBLY 1:2
Α		02.04.15	NEW ISSUE
В		03.01.16	ADD RIDGES; ADD MAT'L PROP; FIX P/N ADD -141/-143/-144/-145/-146
O		04.02.17	ADD CLEARANCE; USE -241 BEARING
D		06.05.17	D3121-25 CAP WAS 1.024, NOW 1.000
E		07.11.07	ADD TOLERANCE TO 0.032 (DETAIL B)

RELEASE

D3121-21 BOLT (1) D3121-241 BEARING ASSEMBLY (1)

D3121-041 BRACKET ASSEMBLY

(REPLACES PREMIER P/N B30-23000-33)

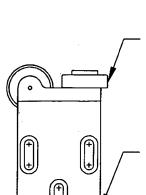


D3121-21 BOLT (1) D3121-241 BEARING ASSEMBLY (1) (2 PLACES)

D3121-13/-14 **BRACKET**

D3121-043 (SHOWN) / D3121-044 (OPPOSITE) BRACKET ASSEMBLY

(REPLACES PREMIER P/N B30-23000-37/-38)



D3121-21 BOLT (1) D3121-241 BEARING ASSEMBLY (1) (2 PLACES)

D3121-15/-16 BRACKET

D3121-045 (SHOWN) / D3121-046 (OPPOSITE) BRACKET ASSEMBLY

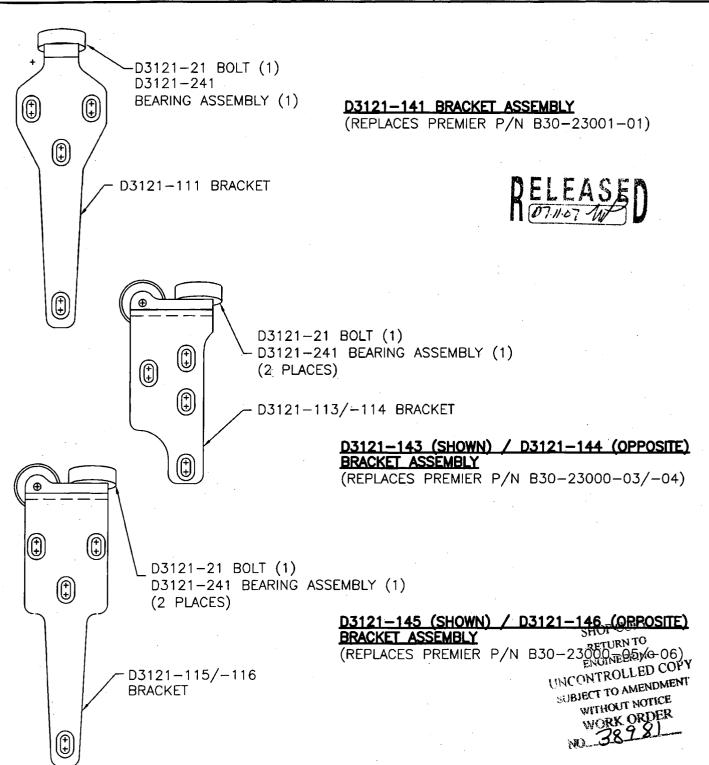
(REPLACES PREMIER P/N B30-23000-35/-36)

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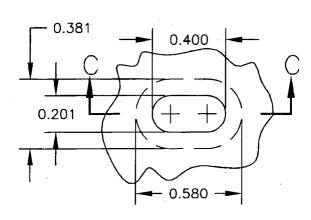
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4		D3121 .	SHEET 2 OF 10
DATE		TITLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:2

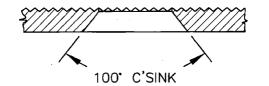




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DATE	144	TITLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:1

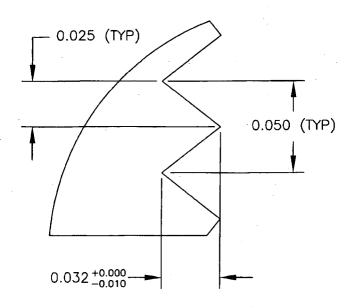
DETAIL A: SLOT DETAIL SCALE 2:1 VIEW ROTATED





SECTION C-C

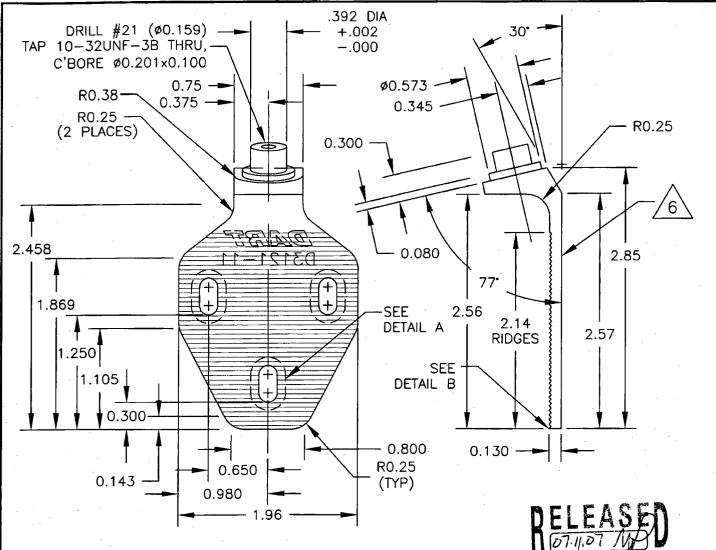
DETAIL B: RIDGE DETAIL PARTIAL SECTION SCALE 1:20



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į	#	-#	D3121	SHEET 4 OF 10
i	DATE		TITLE	SCALE
	07.11.07		BRACKET ASSEME	BLY 1:



D3121-11 BRACKET

1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi

MIN YIELD TENSILE = 100 ksi

- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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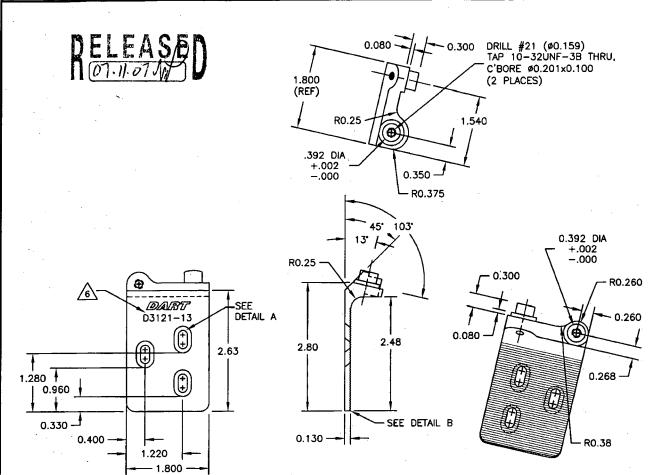
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WORK ORDER

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	4	#	D3121	SHEET 5 OF 10
	DATE		TITLE	SCALE
	07.11.07		BRACKET ASSEMBLY	1:2



D3121-13 BRACKET (SHOWN) D3121-14 BRACKET (OPPOSITE)

1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)

MIN ULTIMATE TENSILE STRENGTH = 150 ksi MIN YIELD TENSILE STRENGTH = 100 ksi

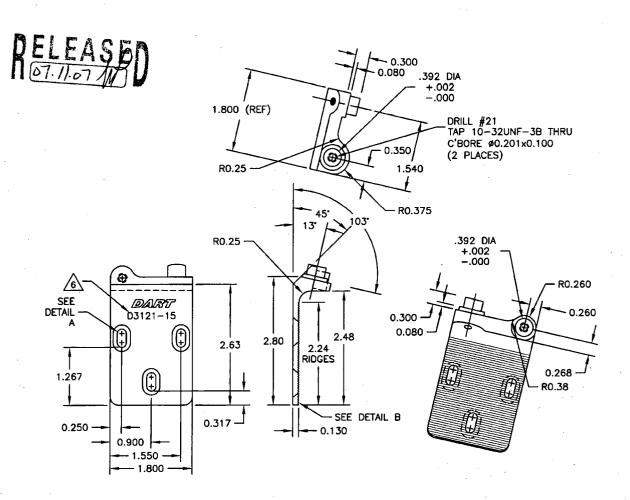
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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4	1	D3121	SHEET 6 OF 10
DATE		TITLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:2



D3121-15 BRACKET (SHOWN) D3121-16 BRACKET (OPPOSITE)

1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi

RETURN TO

MIN YIELD TENSILE = 100 ksi

ENGINEERING

2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

UNCONTROLLED COPY

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3) ALL DIMENSIONS ARE IN INCHES

SUBJECT TO AMENDMENT WITHOUT NOTICE

4) BREAK ALL SHARP EDGES 0.005 TO 0.015 5) ENGRAVE DART P/N AND LOGO AS SHOWN

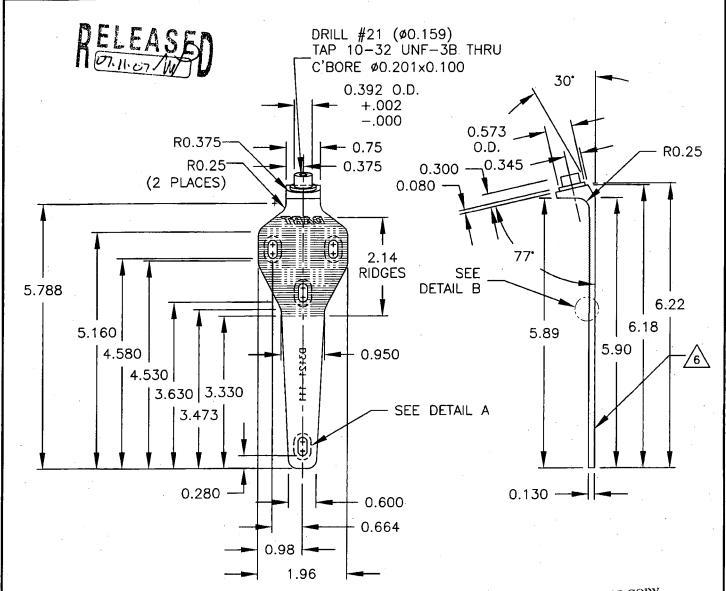
WORK ORDER

6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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#\	-	D3121	SHEET 7 OF 10
DATE		TITLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:2



D3121-111 BRACKET

1) REPLACES PREMIER P/N B32-23001-11

2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) UNCONTROLLED COPY MIN ULTIMATE TENSILE = 150 ksi

MIN YIELD TENSILE = 100 ksi

3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHEWISE NOTED

- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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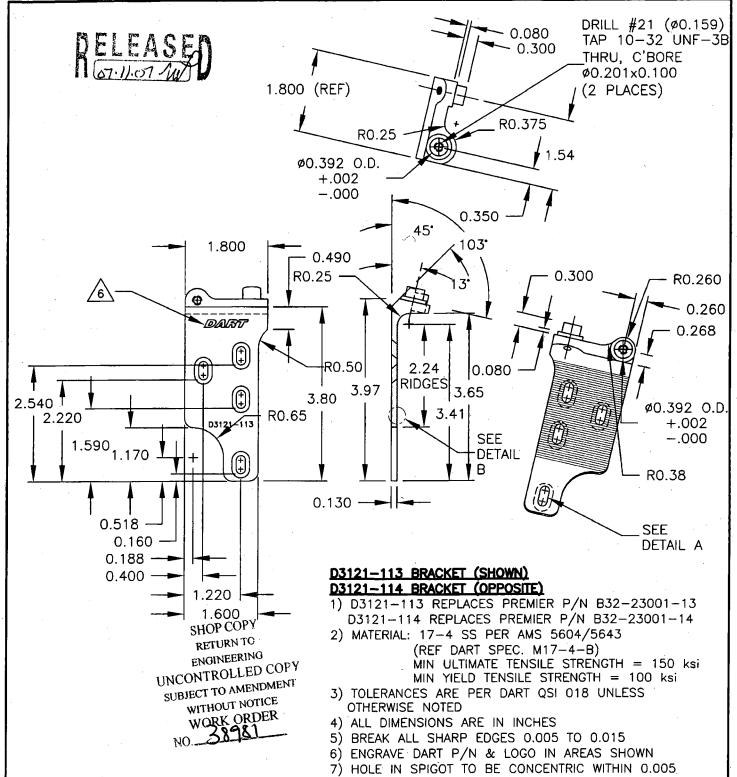
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WORK ORDER

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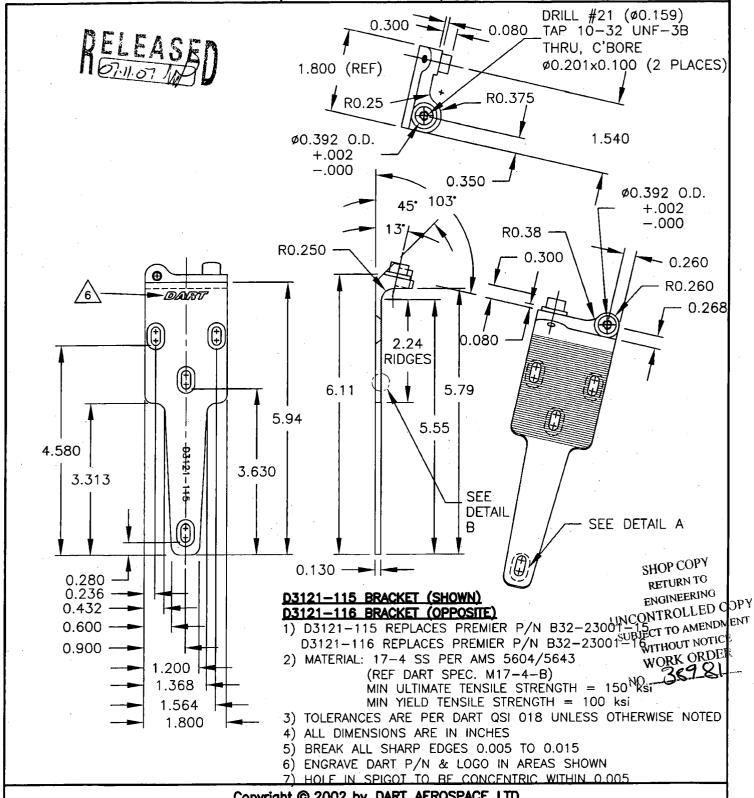
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DATE		TITLE	SCALE	
07.11.07		BRACKET ASSEMBLY	1:2	



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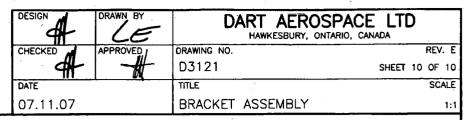


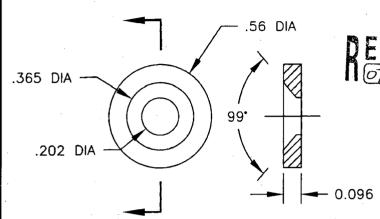
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DATE		TITLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:2



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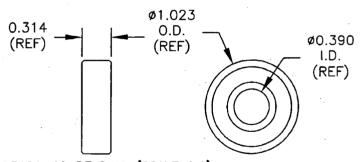






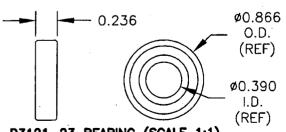
D3121-17 WASHER (SCALE 2:1)

- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



D3121-19 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM 1) MATERIAL: DELRIN ROD, Ø1.25 FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES



D3121-23 BEARING (SCALE 1:1)

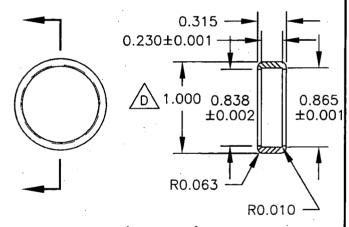
1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z OR KML P/N 6900-ZZ

ALL DIMENSIONS ARE IN INCHES

0.375 TAP 10-32 UNF-3A 0.080 0.050 TO 0.060

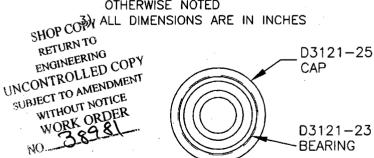
D3121-21 BOLT (SCALE 1:1)

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



D3121-25 CAP (SCALE 1:1)

- - (REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



D3121-241 BEARING ASSEBLY (SCALE 1:1)

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